



**Utah Division of Air Quality  
New Source Review Section**

**Form 10  
Fabric Filters (Baghouses)**

Company \_\_\_\_\_  
Site/Source \_\_\_\_\_  
Date \_\_\_\_\_

**Baghouse Description**

1. Briefly describe the process controlled by this baghouse:

**Gas Stream Characteristics**

2. Flow Rate (acfm):

Design

Max

Average  
Expected

3. Water Vapor Content of Effluent  
Stream (lb. water/lb. dry air)

4. Particulate Loading (grain/scf)

Inlet

Outlet

5. Pressure Drop (inches H<sub>2</sub>O)

High \_\_\_\_\_ Low \_\_\_\_\_

6. Gas Stream Temperature (°F):

7. Fan Requirements (hp) (ft<sup>3</sup>/min)

**Equipment Information and Filter Characteristics**

8. Manufacturer and Model Number:

9. Bag Material:

- ☐ Nomex nylon  
☐ Polyester  
☐ Acrylics  
☐ Fiber glass  
☐ Cotton  
☐ Teflon  
☐ \_\_\_\_\_

10. Bag Diameter  
(in.)

11. Bag Length (ft.)

12. Number of Bags:

13. Stack Height  
\_\_\_\_\_ feet  
Stack Inside Diameter  
\_\_\_\_\_ inches

14. Filtering  
Efficiency  
Rating:  
\_\_\_\_\_ %

15. Air to Cloth  
Ratio:  
\_\_\_\_\_: 1

16. Hours of Operation:  
Max Per day \_\_\_\_\_  
Max Per year \_\_\_\_\_

17. Cleaning Mechanism:  
☐ Reverse Air ☐ Shaker  
☐ Pulse Jet ☐ Other:  
\_\_\_\_\_

**Emissions Calculations (PTE)**

18. Calculated emissions for this device

PM<sub>10</sub> \_\_\_\_\_ Lbs/hr \_\_\_\_\_ Tons/yr

NO<sub>x</sub> \_\_\_\_\_ Lbs/hr \_\_\_\_\_ Tons/yr

SO<sub>x</sub> \_\_\_\_\_ Lbs/hr \_\_\_\_\_ Tons/yr

VOC \_\_\_\_\_ Lbs/hr \_\_\_\_\_ Tons/yr

HAPs \_\_\_\_\_ Lbs/hr (speciate) \_\_\_\_\_ Tons/yr (speciate)

Submit calculations as an appendix.

## Instructions - Form 10 Fabric Filters (Baghouses)

NOTE: 1. **Submit this form in conjunction with Form 1 and Form 2.**

2. Call the Division of Air Quality (DAQ) at **(801) 536-4000** if you have problems or questions in filling out this form. Ask to speak with a New Source Review engineer. We will be glad to help!

1. Describe the process equipment that the filter controls, what product is being controlled, particle size data (if available), i.e., cement silo, grain silo, nuisance dust in work place, process control with high dust potential, etc.
2. The *maximum* and *design* exhaust gas flow rates through the filter control device in actual cubic feet per minute (ACFM). Check literature or call the sales agent.
3. The water/moisture content of the gas stream going through the filter.
4. The amount of particulate in the gas stream going into the filter and the amount coming out if available. Outlet default value = 0.016 grains PM<sub>10</sub>/dscf.
5. The pressure drop range across the system. Usually given in the literature in inches of water.
6. The temperature of the gas stream entering the filter system in degrees Fahrenheit.
7. The horse power of the fan used to move the gas stream and/or the flow rate of the fan in ft<sup>3</sup>/min.
8. Name of the manufacturer of the filter equipment and the model number if available.
9. Check the type of filter bag material or fill in the blank. Check literature or call the sales agent.
10. The diameter of the bags in the system. Check literature or call the sales agent.
11. The length of the bags in the system. Check literature or call the sales agent.
12. The number of bags. Check literature or call the sales agent.
13. The height to the top of the stack from ground level and the stack inside diameter.
14. The filtering efficiency rating that the manufacturer quotes. Check literature or call the sales agent.
15. The ratio of the flow rate of air to the cloth area (A/C).
16. The number of hours that the process equipment is in operation, maximum per day and per year.
17. The way in which the filters bags are cleaned. Check the appropriate box.
18. Supply calculations for all criteria pollutants and HAPs. Use AP42 or Manufacturers data to complete your calculations.